Patient Cart TODO list.

* Configure TDT Data Storage
  + Create new TDT project for EEG study
    - How many channels
    - Sampling rate
    - Naming Scheme
  + Decide on marker layout
    - Reserve numbers for markers
    - Determine number for trial structure (255)
    - Make a blacklist for unacceptable numbers (ASCII range)
  + Add in capability to byte read in from LabVIEW
    - Make cable (D45 connector?)
    - Program TDT to read in and save marker structure
    - Program LabVIEW to send marker information via front panel connector
      * Make it a subVI
  + Add in microphone capability
    - Program TDT to take in analogue? Signals from mic
    - Sampling rate?
    - Storage structure?
* Create a database structure (Microsoft Access) to store:
  + Patient alias
  + Age and other necessary info
  + Languages/Fluency/Learned date?
    - Instead of date of learning, maybe years of fluency?
  + Date of experiment /Time/delta time
    - Or instead of date, maybe the ‘day since implantation’
  + Grid locations/number of grids/pictures
  + Date implanted? (may be too revealing)
  + Days implanted
  + Tasks/number of trials
  + Patient Comments
  + Experimenter Comments
  + Physician Comments
  + TDT Data storage name for that date (and time if we recorded more than once in a day)
* Update PCH IRB
  + Include new hardware/tasks
  + Include new experimenters
    - Is Kevin on IRB list? Who else needs to be on the list? I would add Cody for debug and troubleshooting purposes for some of the LabVIEW.
* Program LabVIEW for **BASE** tasks for Broca’s and Wernicke's area
  + Stroop task?
  + Homophone task?
    - We should ask a linguist what the word for this really is. If we knew the word it would be easier to find words than typing random things into google translate.
    - Find concrete words (items and things, or do we want ideas?)

|  |  |  |  |
| --- | --- | --- | --- |
| English | Spanish | French | … |
| Pan (cooking) | Pan (bread) | Pain (bread) |  |
| Pies (Pecan pie) | Pais (country) |  |  |
| Football | Futbol (soccer) |  |  |
| Arena (Gladiator) | Harina (Flour) |  |  |
| Mason (Stonecrafter)) |  | Maison (house) |  |
| Pays (cash money) |  | Pays (Country) |  |
| Port (boats) |  | Porte (door) |  |
| Tear (tearing paper) |  | Terre (Earth) |  |

* + Sine Reading task?
* Program LabVIEW for **BONUS** tasks (for if we have time or a reason to explore) for Broca’s and Wernicke's area
  + Language switching (depends on fluency)
    - Receive Cue in one language, respond in a second language
  + Multilingual Stroop?
  + Idea representation
    - A horse is a caballo is a cheval is a cavallo
    - A house is a casa is a maison is a casa
      * (English, Spanish, French, Italian)
* PMT and TDT parts and connectors
* Dry runs of entire system
* Preparation for biomed checkoff and inspection
  + Also be sure that the charging adapter for the Neuro Digitizer is in the cart.
* Ensure that the TDT data extraction scripts work
  + Also write script to extract and plot time slices of the data for physicians to see.
    - Name axes
    - Include subtle background vertical delineations for each minute or 30 seconds or whatever makes sense for the time window.
    - Ensure that the .fig is working
* Additional equipment
  + Second monitor?
    - I assume PCH has an ‘over the bed’ table that we can use
  + Pens and paper for just in case we need to annotate notes to add to the Access database later
  + USB 3.0 External Hard Drive for bringing data to ASU or program updates to PCH